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VOCATIONAL EDUCATION RESEARCH AND DEVELOPMENT COORDINATING UNIT FOR THE STATE OF OREGON.

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A FINAL REPORT WAS GIVEN ON THE ACTIVITIES OF THE OREGON RESEARCH COORDINATING UNIT FOR THE 18-MONTH PERIOD FROM JUNE 1, 1965 TO NOVEMBER 30, 1966. THIS RESEARCH COORDINATING UNIT (RCU) WAS ESTABLISHED TO IMPLEMENT THE COORDINATING EFFORTS RELATING TO RESEARCH AND PROGRAMS OF EDUCATION AND TRAINING IN VOCATIONAL EDUCATION. A TWO-FOLD PURPOSE WAS DEFINED FOR THE UNIT--(1) TO STIMULATE QUALITY RESEARCH AND (2) TO IMPLEMENT RESEARCH FINDINGS IN INNOVATIVE PROGRAMS OF EDUCATION AND TRAINING. FOUR OBJECTIVES OF THE UNIT WERE (1) TO IDENTIFY RESEARCHABLE PROBLEMS IN VOCATIONAL EDUCATION AND ESTABLISH RESEARCH PRIORITIES, (2) TO STIMULATE QUALITY RESEARCH IMPLICATIONS FOR VOCATIONAL EDUCATION AND UPGRADE RESEARCH COMPETENCIES OF VOCATIONAL EDUCATORS, (3) TO DEVELOP AND IMPLEMENT EFFECTIVE STRATEGIES AND PROCEDURES OF INFORMATION DISSEMINATION, AND (4) TO FACILITATE IMPLEMENTATION OF RESEARCH FINDINGS IN INNOVATIVE AND EXEMPLARY PROGRAMS OF VOCATIONAL EDUCATION AND TRAINING. ACTIVITIES WERE DEFINED TO ACCOMPLISH THE FOUR MAIN AIMS. AN EVALUATION OF THE RCU WAS MADE TO DETERMINE THE EXTENT TO WHICH THE GOALS DEFINED FOR THE UNIT WERE APPROPRIATE AND TO ASSESS THE EFFECTIVENESS OF ACTIVITIES IN TERMS OF ACHIEVING THE MAJOR AIMS. RESULTS INDICATED GENERAL AGREEMENT THAT THE GOALS WERE APPROPRIATE AND SHOULD BE RETAINED AS MAJOR AIMS OF THE UNIT. SOME OF THE ACTIVITIES WERE RATED AS HIGHLY IMPORTANT FOR ACHIEVING AIMS, OTHERS WERE CONSIDERED UNIMPORTANT, INEFFECTIVE, OR LESS RELEVANT. EVALUATION DATA WERE USED AS THE BASIS FOR PLANNING THE RCU CONTINUATION PROGRAM. (TC)

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VOCATIONAL EDUCATION RESEARCH AND DEVELOPMENT COORDINATING UNIT FOR THE STATE OF OREGON

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T. A. Ryan

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I. Introduction

A. Background

This is the final report of activities during the eighteen month period, June 1, 1965 to November 30, 1966 related to Contract No. OE 5-85-128, Project No. 322-65, entitled "Vocational Education Research and Development Coordinating Unit for the State of Oregon."

The Research Coordinating Unit, established in Oregon June 1, 1965, under provisions of Sec. 4(c) of the Vocational Education Act of 1963, P. L. 88-210, was one of twenty four state units established in 1965 to implement objectives and priorities developed by the Division of Adult and Vocational Research, U. S. Office of Education.

B. Problem

The developmental plan for the Oregon Research Coordinating Unit was based on the assumption that a primary purpose of vocational education is to prepare youth and adults for gainful and satisfying employment. It was assumed, further, that vocational education has a responsibility for developing programs of education and training which meet current and projected employment demands and which take into account characteristics and backgrounds of individuals enrolled in vocational-technical curricula.

The design of the Oregon unit reflects the philosophy that efficient educational planning in an industrial-urban society in a period of rapid change cannot proceed on a trial-and-error basis, but, rather must implement a curriculum decision process which provides for an adequate information dimension. It is assumed that efficient curriculum decisions in vocational education are made on the basis of considered information about human resources, occupational opportunities, and educational development.

The proliferation of research efforts, which followed enactment of P. L. 88-210, and the widespread attempts to implement research results in vocational education programs pointed to the need for coordination of efforts in research endeavors and program development. The Oregon RCU was set up to meet this need.

The unit in Oregon was developed around the concept of coordinating efforts of the State Department of Education, institutions of higher education, and local schools. This concept of three-way coordination underlies the entire operation of the Oregon Research Coordinating Unit. In essence the unit was designed to build on existing strengths in the state--the research expertise and training potential of the institutions of higher education; the leadership of the

State Director of Vocational Education; the strength of the State Department of Education in developing innovative and exemplary programs; and implementation of exemplary programs by secondary and post-secondary schools.

The Oregon unit reflects a commitment by the State Department of Education, and the State Director of Vocational Education that the potential of vocational education for contributing to and strengthening a democratic society is great; and that the extent to which the potential is realized is limited only by the extent to which existing knowledge about human resources, occupational opportunities, and educational development can be organized; gaps in knowledge identified; vocational education theory generated; and research findings used to develop exemplary and innovative programs for vocational education.

C. Purposes

A two-fold purpose was defined for the Oregon Research Coordinating Unit to implement the goal of coordination: (1) to stimulate quality research with implications for vocational education; and (2) to facilitate implementation of research findings in innovative programs of vocational education and training. The unit defined four major aims: (1) to identify researchable problems and issues and establish research priorities; (2) to generate quality research and upgrade research competencies of vocational educators; (3) to develop and implement effective strategies and procedures of information dissemination; and (4) to facilitate implementation of research in innovative programs of training and education.

II. Method

A. Organization

The Oregon Research Coordinating Unit is located at Oregon State University, Corvallis. The unit is a cooperative undertaking of the State Department of Education and State System of Higher Education. The director of the unit, Dr. T. A. Ryan, holds academic appointment to the School of Education, Oregon State University. Dr. Wm. G. Loomis, State Director of Vocational Education, is associate director of the RCU.

The unit staffing plan included three major categories--administrative, professional, and support (See Appendix A-1). The administrative staff was responsible for project management. The

professional staff was responsible for aim-related activities. Support staff included secretaries, library and research assistants. The operational program of the unit was fully underway by October, 1965. Under the organizational plan, one professional staff member with research responsibilities and the director were based at RCU offices, Oregon State University. One professional staff member with responsibility for liaison between RCU, State Director of Vocational Education, and local schools was located in the office of the State Director of Vocational Education.

B. Allocation of Staff Resources

During the period, June 1, 1965 to November 30, 1966, there were 15,801 manhours allocated for project management and aim-related activities.

A total of 1,940 hours was devoted to project management, with 14,061 hours devoted to aim-related activities. A total of 1,376 hours was spent toward achieving Aim 1, identifying problems; 3,436 hours toward achieving Aim 2, stimulating research; 4,283 hours toward achieving Aim 3, disseminating information; 4,766 hours toward achieving Aim 4, implementing innovative programs. The plan for allocating human resources was devised so that 10% of the manhours allocated to aim-related tasks would be devoted to problem identification (Aim 1) with 25 percent of the manhours devoted to encouraging quality research (Aim 2), 30 percent for implementing effective strategies and procedures for information dissemination (Aim 3), and 35 percent for facilitating implementation of research findings (Aim 4). Distribution of Oregon RCU manhours is shown in Appendix A-2.

C. Statewide Structure

The organization of the unit was designed to provide maximum opportunity for coordinating ideas and efforts of the State Department of Education, governmental agencies in the state, and public secondary and post-secondary schools.

A statewide network of seven advisory panels was established. Five of the panel members came from the State Department of Education. Twenty four members were from disciplines in social and behavioral sciences and education. The panel network is shown in Appendix A-3.

A Central Advisory Panel acted as steering committee for the unit, providing advice and counsel for efficient operational planning. The panel was made up of the chairmen from the seven panels, and the State Director of Vocational Education, ex officio member. The aims and the organization established to facilitate exchange and stimulation of ideas and efforts related to achieving the aims are shown in Appendix A-4.

D. Major Aims and Tasks

To stimulate quality research and to increase implementation of research findings in vocational education programs and practices, the unit defined four major aims and developed a task structure to determine allocation of resources and define the sequence of activities.

The four major aims and the tasks considered essential for achieving these aims were defined as follows:

Aim 1: to improve definition of research problems and to identify issues and problems that need study through research.

Task a--determine major problems and identify studies related to problem areas.

Task b--related local-level problems to major research areas.

Aim 2: to make a dynamic and interdisciplinary approach to stimulate and encourage quality research, upgrade competency in vocational education research, and contribute to vocational education theory building.

Task a--increase research sophistication and interdisciplinary research in vocational education.

Task b--decrease duplication of research activities.

Task c--encourage and sponsor pre-service and in-service research training for vocational educators.

Task d--improve proposal writing, develop design and data analysis techniques.

Aim 3: to implement effective strategies and procedures for information dissemination.

Task a--develop and maintain a computerized information retrieval center.

Task b--establish a repository of useful information related to vocational education.

Task c--make pertinent information easily available and readily accessible.

Aim 4: to facilitate implementation of research findings to improve programs, practices, and facilities of vocational education.

Task a--increase innovative practices and programs at local level.

Task b--encourage the development and use of new materials and methods.

Task c--increase coordination of theory and practice.

III. Results

Major activities of the Research Coordinating Unit during the first eighteen months of operation were directed toward achieving the primary aims.

A. Activities to Achieve Aim 1

Aim 1 was to improve definition of research problems and to identify researchable issues and problems. To achieve this aim, four major activities took place as follows: (1) a brainstorming session was held, (2) a survey was conducted, (3) a work conference was held, and (4) Central Advisory Panel meetings were held.

1. Brainstorming Session. A brainstorming session, held November 9, 1965 in Salem, Oregon, was attended by invited staff members of the State Division of Community Colleges and Vocational Education, and administrators of public secondary and post-secondary schools. The following problems were identified at the session:

a. vocational education has a poor image.

b. methods of disseminating information to students are ineffective.

c. methods for determining effectiveness of apprenticeship program are not adequate.

d. methods of selecting teachers are inadequate.

e. requirements for apprenticeship are not clear.

2. Survey. A survey was made to determine which vocational problems were considered most critical in the state by school personnel consisting of vocational educators, principals, and superintendents. A questionnaire was mailed October 15, 1965 to 438 educators in all counties in Oregon.

On the questionnaire sixteen national problems directly related to vocational education were listed and respondents were asked to rate local significance of each problem using a scale of 4 = great significance, 3 = more than average significance, 2 = less than average significance, and 1 = very little significance.

Of the 438 questionnaires mailed out, 222 were returned. The greatest number of survey returns were received the first week after mailing. The last return received on March 4, 1966. The rate of returns is shown in Appendix B-1.

The 222 questionnaires returned were subjected to statistical treatment. Analysis showed that the national problems judged to be of great or more than average significance in Oregon were:

a. rural communities cannot provide adequate vocational education.

b. students cannot make realistic job choices.

c. schools lack quality teachers in vocational education.

d. students lack knowledge, attitudes, and skills to adapt to changing manpower needs.

Appendix B-2 shows the rank order of vocational education problems in Oregon as determined by 222 educators.

An analysis of survey responses by geographic location of respondents shows that problems tended to follow a regional pattern. The counties in which problems were considered of local significance are as follows:

a. Lincoln, Polk, Yamhill--workers are unable to adjust to changing situation.

b. Clatsop, Tillamook--students cannot make realistic job choices according to potentials.

c. Columbia, Washington, Clackamas, Lane--rural communities cannot provide adequate vocational education.

d. Coos, Curry, Grant, Malheur--there is a lack of effective teachers for needed vocational education programs.

e. Union, Wallowa, Multnomah, Baker--students are unable to make continuing career choices.

f. Benton, Linn, Jefferson, Deschutes, Crook, Lake, Harney, Douglas--rural communities cannot provide adequate vocational education programs.

g. Hood River, Wasco, Sherman, Gilliam, Wheeler--students cannot make realistic job choices according to potentials and students lack information about predicted changes in local manpower needs.

h. Morrow, Umatilla--students cannot make realistic job choices according to potentials and there is lack of effective teachers for needed vocational education programs.

i. Josephine, Jackson, Klamath--rural communities cannot provide adequate vocational education and students lack information about hiring practices of business and industry.

j. Marion--students lack information about skills and knowledge needed for current labor market and students lack information about hiring practices of business and industry.

Examination of Appendix B-4 clearly shows the correlation between geographic area and the problem identification.

3. Work Conference. A conference held January 14, 1966 in Cottage Grove, Oregon, was attended by representatives from the University of Oregon, Oregon State University, Eastern Oregon College, Southern Oregon College, Oregon College of Education, Oregon Technical Institute, State Department of Education, and the Research Coordinating Unit.

Two groups were formed to define problems and to identify researchable issues with implications for vocational education.

Group I reported as follows:

a. a data collecting center is needed to share research results and provide a service to both higher education and local schools.

b. members in higher education should attend brainstorming sessions with local educators concerned with vocational education.

c. local school personnel should implement action research in vocational education.

d. staff members from institutions of higher education should be given released time to promote and prepare research proposals.

e. a priority list of critical researchable problems in Oregon should be drawn up for the benefit of educators.

Group II reported as follows:

a. dissemination of valid research results to local level personnel is needed.

b. criteria to identify qualified researchers are needed.

c. collaboration between vocational teachers and qualified researchers on educational problems is needed.

d. dissemination of information in non-technical language is needed.

Questions directed to RCU staff members by conferees concerned:

a. whether the unit could provide primary data on manpower.

b. whether the unit could provide model research designs.

c. whether the unit could support released time to faculty members of institutions of higher education so that they could consult with local personnel.

4. Central Advisory Panel Meetings. Vocational education needs and the ways to fulfill these needs were discussed at the Central Advisory Panel meeting held at Oregon State University April 15, 1966. Six basic vocational education needs were identified as follows:

a. a need for teachers to be prepared for a broader appreciation of the world of work.

b. a need to help students discover the values that influence their choices concerning the world of work.

c. a need for individuals and communities to learn about the advantages of vocational education and take pride in participating in the field.

d. a need for assistance in helping students make vocational choices that are realistic.

e. a need for teachers, students, and communities to understand job clustering.

f. a need for teachers to aid students in changing their attitudes and aspirations concerning the world of work.

The panel formulated methods to meet these needs through public secondary and post-secondary schools, institutions of higher education, and the Research Coordinating Unit. Suggested methods to be implemented in secondary and post-secondary schools were:

a. offer preparatory programs in job training for students who do not go on to college.

b. involve schools in experimental, pilot, and demonstration programs relating to vocational education research areas.

c. develop comprehensive placement programs.

Suggested methods to be implemented in institutions of higher education were:

a. encourage teachers to become more skilled in teaching reading and writing.

b. encourage faculty members of institutions of higher education to become more available for consultation with high school and community college staff members and students.

Suggested methods to be implemented by the Research Coordinating Unit were:

a. disseminate information about exemplary and innovative vocational programs so that Oregon educators will know about recent research and will not duplicate efforts.

b. concentrate library efforts on obtaining literature on vocational education research which is not easily available or has not been published.

c. send educators and researchers information about priorities and needs of the U. S. Office of Education.

d. determine the most effective use of seed money for funding pilot, demonstration, and experimental projects in Oregon.

e. hold traveling seminars to disseminate information to people throughout the state.

B. Activities to Achieve Aim 2

Aim 2 was to make a dynamic, interdisciplinary approach to stimulate and encourage quality research, upgrade competencies in vocational education research, and contribute to vocational education theory building. To achieve these objectives, six major activities took place as follows: (1) consultation services were provided, (2) proposals were reviewed, (3) research training materials were prepared, (4) proposals were prepared, (5) workshops were conducted, and (6) research was directed.

1. Consultation Services. Consultation services were provided to the local school districts including Gresham, Klamath Falls, and Portland, Clatsop-Tillamook, Central Oregon, Treasure Valley Community College, Oregon College of Education, Oregon State University.

The Research Coordinating Unit director provided consultative services to Alaska and California Research Coordinating Unit directors on administration, establishment, and development of respective units.

2. Proposal Review. The Research Coordinating Unit reviewed forty-three proposals to support vocational education research. Of these, four were recommended for approval, eighteen were recommended for provisional approval, and twenty-one were recommended for disapproval. Sources of referral and RCU review action are shown in Appendix C-1.

3. Research Training Materials. Two kinds of educational materials were developed by Research Coordinating Unit, pamphlets and model research proposals.

a. Four educational pamphlets were designed to stimulate and encourage quality research and to upgrade competencies:

(1) Steps in Conducting a Research Study

(2) The Preparation of Proposals

(3) Criteria for Evaluation of Proposals

(4) Review Procedures for Research Reports Submitted to RCU for Critical Review

b. The unit prepared a model proposal which could be modified and adapted according to specific cases and unique situations. "A Model Proposal for Research Grant Applications Under P. L. 88-210 Vocational Education Act, Section 3.3, Oregon State Plan for Vocational Education: Determining Need for Vocational Education." The proposal was designed so it could be used in any local setting in which the problem was one of determining potential student population for vocational education, determining employment opportunities in a given geographic area, determining aspects of the vocational education program which appear to need modifications, determining how to achieve coordinate functioning of educational units to develop effective vocational education programs. This model was distributed jointly by Research Coordinating Unit and State Director of Vocational Education.

4. Proposals. The unit prepared two kinds of proposals: training proposals, and research proposals. The Research Coordinating Unit prepared and submitted to the U. S. Office of Education vocational education training proposals as follows:

a. research training

b. counselor training

c. guidance supervisor training

d. curriculum directors training

The unit assisted in preparation of a proposal submitted to the U. S. Office of Education by Oregon College of Education, September 26, 1966. The proposal was entitled An Experimental Vocational Education Institute for the Teaching of Creative Job Search Techniques to the Unemployed and/or Underemployed, Teachers, Counselors, and Others Who Work With the Disadvantaged. The proposed program calls for eight four-week institutes for the unemployed and/or underemployed and one institute for teachers, counselors, and social workers, to be held during the calendar year 1967.

RCU staff prepared and submitted to the U. S. Office of Education a proposal on communication in vocational education, and assisted in preparing a proposal for a Little Job Corps program to be conducted jointly by the State Division of Community Colleges and Vocational Education and the University of Oregon.

5. Workshops. Three workshop activities were implemented:

a. The RCU director was a consultant at a workshop on proposal writing and development, March 7-9, 1966 at the University of Oregon. Participants included twenty regional representatives from the Oregon Council for Curriculum and Instruction, twenty staff members of the State Department of Education, and ten representatives from the colleges and universities in Oregon.

b. The RCU director, acting as research consultant to the California Research Coordinating Unit, was in charge of a session on experimental research at a five-day workshop in October, 1966 at Sacramento, California.

c. Research Coordinating Unit assisted in developing a vocational education workshop conducted at Oregon State University, August 1 to August 12, 1966. College credit was given for this course. The course work under the guidance of Dr. Herschel Lester, visiting professor from the University of Georgia, incorporated techniques and methods for research procedures in vocational education.

Participation was restricted to those with limited research experience. Enrollment totaled eight.

6. Directed Research. Two surveys carried out under RCU direction, were aimed at gathering preliminary data to indicate the feasibility of further study. These surveys were neither sophisticated in design nor implementation. It was assumed, however, that the information from the surveys might suggest directions for later research to take.

a. One survey was aimed at finding out interest of faculties in universities and colleges in vocational education. In March, 1966 a survey was initiated to identify faculty members who were interested in the aims and activities of RCU. A sample copy of the RCU newsletter, Oregon Vocational Education Newsletter (OVEN), along with a form to return indicating their desire to be placed on the mailing list, was mailed to 601 faculty members in the State System of Higher Education. It was assumed that the faculty members interested in vocational education research would want to receive a newsletter devoted to this subject.

The survey materials were mailed March 15, 1966 and by July 7, 1966 a total of eighty-one had been returned. The thirteen percent return was considered to be a result indicating lack of interest. A distribution of returns is shown in Appendix D-1.

a. Another survey conducted by RCU was concerned with determining the opinions of Oregon labor union representatives on training needs in industries and trades. An interview guide was used to elicit responses. A total of 122 labor union officials were interviewed in Portland, Eugene, Springfield, Albany, Sweet Home, Corvallis, Salem, Coos Bay, Medford, Grants Pass, Roseburg, and Myrtle Creek. The interviewees represented labor organizations for workers in the following trades and industries: clothing and textiles, paper products, manufacturing, communications, hoisting and portable engineering, food processing, hotel and restaurant, chemical, building, plumbing, trucking, carpentry, upholstering, metal working, roofing, cement, plastering, lumbering, and public services.

The study indicated the following information about the interviewees:

(1) 49 percent had no knowledge about job training programs in their area including night classes offered in local community colleges.

(2) 68 percent did not know of any training that would be useful for beginners in the field.

(3) 40 percent felt there was a need for on-the-job training to upgrade the skills of their employees.

(4) 10 percent felt there was a need for basic education classes.

In response to an open-ended question, "What comments do you have about vocational training programs in Oregon?", twenty-two out of one hundred twenty-two answered they would cooperate if job training programs were started; seventeen felt the need for training programs and aptitude tests.

C. Activities to Achieve Aim 3

Aim 3 was to implement effective strategies and procedures for information dissemination. To achieve this aim, five major activities took place: (1) a newsletter was issued, (2) information bulletins were issued, (3) a dissemination center was established, (4) an information retrieval center was established, and (5) meetings were attended and reports and papers presented.

1. Newsletter. Issuing the newsletter involved (a) establishing a circulation list; (b) defining layout and preparing copy; and (c) conducting an evaluation.

Beginning in October, 1965 Oregon Research Coordinating Unit issued a monthly newsletter, Oregon Vocational Education Newsletter (OVEN). The initial circulation list was provided by the State Director of Vocational Education and names were added to the subscription list on request. By October, 1966 circulation had reached 429.

The newsletter was designed to include reports of noteworthy researching having implications for Oregon vocational education; current state and federal news about legislation; reports on policy, projected plans, priorities, and economic indicators; brief summaries in non-technical terms of recent articles in professional journals; and news items of special interest to Oregon vocational educators.

RCU attempted an evaluation of OVEN in March, 1966. A check list was attached to the March issue of OVEN and mailed to

236 individuals on the circulation list. The survey consisted of ten statements to be rated about the value of OVEN and four open-ended statements concerning content.

Twenty-seven questionnaires had been returned by July 7, 1966. Because of this low rate (12%), the results were not considered significant and have been treated only as indicators. One explanation for the low rate of return was the timing of the survey.

Twenty-three of the twenty-seven respondents answered that they read OVEN and nineteen answered that they would recommend it to others. The evaluation is shown in Appendix E-1.

RCU attempted to maintain a continuing evaluation of the newsletter through analysis of solicited and unsolicited comments directed to the editor. A representative sample of these comments is shown in Appendix E-2.

2. Information Bulletins. From June 1, 1965 to November 30, 1966 Research Coordinating Unit issued a number of bulletins for the purpose of disseminating information about vocational education research. Informational bulletins were prepared and distributed to inform vocational educators about research and innovative programs in vocational education. The bulletins were of two kinds, reporting of research and programs, and selected bibliographies and references.

a. Oregon Research Coordinating Unit issued two bulletins. One bulletin, Vocational Education Research Studies Conducted in Oregon Since 1960, is a report of research in Oregon between 1960 and 1965 having implications for vocational education. To gather information for preparing this bulletin, a questionnaire was mailed on December 15, 1965 to vocational educators calling for listings of ongoing or completed studies. This information was combined with data prepared from a library survey of Dissertation Abstracts, Education Index, Economic Index, and Psychological Abstracts. A bulletin issued in November, 1966 reported an overview of research in vocational education in Oregon during 1965-66 and included abstracts of projects funded by the U. S. Office of Education under provisions of Section 4(a) and 4(c), P. L. 88-210. Time distribution of survey returns is shown in Appendix F-1.

b. Two bibliographies on vocational education and a supplement were issued.

3. Dissemination Center. The Research Coordinating Unit Dissemination Center was one of the activities aimed at achieving effective dissemination of information. Activities of the center were of two kinds, library service and dissemination center evaluation.

a. Library service involved loan and reference of documents. Documents were selected, acquisitioned, cataloged, and abstracted. Results from a survey to identify user needs formed the basis for document selection criteria development. The survey was made by sending a questionnaire to 236 vocational educators. Respondents were asked to identify kind of information they would use if available and to indicate how they would use the information.

Between June, 1965 and November, 1966, there were 529 documents selected for RCU dissemination center and after evaluation 400 were acquisitioned. One hundred twenty-nine were evaluated at the unit and not selected. Four of the 400 documents in the dissemination center were lost. A summary of the dissemination center activities from June, 1965 to November, 1966 is shown in Appendix G-1.

b. Evaluation of the center was made by conducting a user servey and by analyzing user reactions. The dissemination center was used by a total of 138 individuals between June 1, 1965 and November 30, 1966. The largest number of users, fifty-one were elementary and secondary school personnel, in addition to elementary and secondary school staff, forty-one university faculty, twenty-eight state and federal employees, and sixteen community college and vocational technical institute staff members used the library. The identification of users is shown in Appendix G-2. A representative sample of individual reactions is given in Appendix G-3.

4. Information Retrieval System. Information retrieval activities involved development, trial, and operation.

a. A computerized information retrieval system was developed to meet the needs of vocational educators in the Northwest for information on human resources, occupational opportunities, and educational resources and development. The system was planned to make readily available and easily accessible bibliographies on selected vocational education topics; lists of research projects by geographic areas; lists of conferences, legislation, innovative programs, curricula, statistical reports; and lists of researchers and program specialists. The system was set up to utilize the CDC 3300, installed in June, 1966 at the Oregon State University Computer Center.

The period from September 1, 1965 to July 31, 1966 was devoted to design and system improvement. Design activities included a study of library functions of the computer; determining anticipated output; designing a model for an Oregon computerized vocational education information retrieval system; developing criteria for determining pertinent information and maintaining quality control of input data; developing pre-coordinated inverted index; developing users' index manual; training indexers; developing a plan for user-needs survey; and developing input source list. In the design operation of the information retrieval system a trial search was completed on June 30, 1966 using thirty indexed documents and six requests.

b. The period from July 1, 1966 to August 31, 1966 was devoted to trial runs to test the system and identify needed modifications. During July and August, 150 documents were indexed and banked to test reliability of indexers and validity of selection criteria. These tests indicated a need for refinement of criteria to eliminate items with little value for information retrieval system users. An effort was made during this period to give emphasis to documents of particular interest to users in the Northwest. The experimental phase ended on August 31, 1966, and the information retrieval system became operational September 1, 1966. A summary of information retrieval operation is given in Appendix H-1.

c. During the operational period September 1, 1966 to November 30, 1966 a total of 269 documents was indexed with 250 of the 269 banked at the computer center.

5. Meetings, Reports and Papers. Information about vocational education was disseminated through a number of reports and papers given at professional meetings, conferences, and conventions.

The Research Coordinating Unit director reported to the School of Education faculty, Oregon State University, in September, 1966 on vocational education in Oregon.

Information dissemination on an interstate level was accomplished through participation in the regional and national conferences and conventions which are listed in Appendix I-1.

D. Activities to Achieve Aim 4

Aim 4 was to facilitate implementation of research findings to improve programs and practices of vocational education. To achieve this aim, four activities took place: (1) schools were visited,

(2) programs were innovated, (3) seminars were conducted, and (4) demonstrations were prepared.

1. School Visitations. The Research Coordinating Unit made a three-way thrust toward vocational education program development by school visitations.

a. Research Coordinating Unit school visits were made to provide assistance in developing curricula. The educational specialist, assigned to full-time staff of the State Director of Vocational Education, visited local schools throughout the state to discuss research implications for curriculum. Schools visited included districts of East Linn, Coos Bay, Grants Pass, Portland, and Medford; county school districts of Klamath, Clackamas, Yamhill, Washington, and Clatsop-Tillamook; Treasure Valley Community College, Lane County Community College, Central Oregon College.

b. School visits were made to help in connection with course approvals and setting up pilot programs. The educational specialist visited local schools to assist in establishing Little Job Corps program. He made course approvals for pilot programs including those in counties of Jackson, Douglas, Josephine, and Yamhill.

c. Visits were made to local schools to identify innovative curricula which could be used as demonstration programs. Staff members visited local schools including projects in gainful employment, Salem, and the service station attendants project at Philomath High School, Philomath, Oregon.

2. Program Innovations. A major attempt to innovate programs was made through the work of the educational specialist. An important part of the work of the educational specialist was to implement a liaison function between the State Director of Vocational Education, RCU, and local schools. All activities of the educational specialist were directed toward developing and implementing innovative and exemplary vocational education programs, including efforts directed to identifying job clusters for the Statewide Systematic Planning, Implementing, Evaluating of Vocational Education (PIE Project). The State Director of Vocational Education was instrumental in expediting and encouraging development and implementation of innovative programs.

3. Seminars. A seminar series was planned implementing recommendations of the Central Advisory Panel. The series served a two-fold purpose: disseminating information and helping vocational

education develop research-based innovative programs. A seminar on application of cost-benefit analysis for planning and evaluating vocational education was held October 19, 1966. Fifty invitations were mailed on October 5, 1966 and nineteen individuals attended. Fifteen participants responded to an evaluation checksheet, giving their reactions to the seminar. The responses, summarized in Appendix J-1, indicated that most of the participants learned something new, considered the information valuable, and favored having future seminars.

4. Demonstration Programs and Instructional Aides. The Research Coordinating Unit prepared demonstration proposals for local or regional implementation, and prepared research and development proposals for statewide pilot program implementation. The unit also issued instructional aides to help vocational educators in developing programs and identifying effective techniques.

a. Research Coordinating Unit prepared demonstration proposals outlining research-based innovative programs for local schools. The State Director of Vocational Education provided continuing supervision and assistance to local educators in setting up and implementing curricula outlined in the demonstration proposals. The following demonstration proposals were prepared:

(1) a demonstration project to implement occupational service functions through an integrated program of observation and directed inquiry.

(2) a demonstration project to evaluate a guidance program and teach vocational decision-making to high school youth.

(3) a demonstration project to evaluate and innovate a gainful employment project.

(4) a proposal for an experimental senior high school course in family living and child development.

b. The unit prepared the following proposal for State Director of Vocational Education to use in determining program needs, evaluating vocational education, and setting up pilot programs.

(1) a proposal to determine regional needs for vocational education.

(2) a proposal for making cost-benefit analysis of regional vocational education programs.

(3) a proposal for an experimental pogram of preparing home health aides.

c. Descriptions of new techniques and materials for use by vocational educators were made available following he suggestions of the Central Advisory Panel members and the panel work conference participants. These descriptions were issued i October, 1966 and November, 1966. They were designed to describe in nontechnical language research findings which could be impemented directly in a school setting by vocational educators.

E. Evaluation of Research Coordinating Unit

An evaluation of the Research Coordinating Uni was made to determine the extent to which objectives were viable nd activities were effective in achieving the basic purpose of the unit. Evaluation was made by implementing survey techniques with 750 questionnaires mailed to educators in Oregon on December 1, 1966. Atally revealed that 123 questionnaires had been returned by Decmber 23, 1966. Analysis indicated that respondents represented a cross section of the state in terms of geographic distribution and espondent occupation. Respondents included teachers, supervisor, administrators, and counselors. Questionnaire results are reported in Appendixes K-1 and L-1.

IV. Discussion

The Oregon Research Coordinating Unit was designd to achieve four aims. To some extent each of these aims was achived.

A. Aim 1 was to identify research problems with inplications for vocational education. Three populations were selectd to establish problem priorities.

Examination of the lists of problems identified by the three populations reveals lack of consensus concerning problens in vocational education. The different problems were identifiedat various levels as follows:

1. Representatives from the State Division of Community Colleges and Vocational Education, and administrators fom public schools and post-secondary schools were most concerne with how to

improve the poor image of vocational education, how to get information to students, how to select better teachers, how to systematize program standards and how to make apprenticeship requirements more clear.

2. Teachers and other personnel in secondary schools throughout the state were most concerned with the inability of rural communities to provide adequate vocational education programs, the inability of students to make realistic job choices, the shortage of qualified teachers in vocational education, and the inadequate skills and poor attitudes of the students in adapting to changing manpower needs.

3. Faculty members of institutions of higher education were most concerned about the need to set up a priority list of critical research problems, the need to bring data together from various areas, the need to establish criteria to identify qualified researchers, the need to bring qualified researchers and vocational education teachers with problems together, the need to set up a data collection center for sharing research results, the need to involve higher education staff members from various disciplines and local school personnel, and the need to disseminate information in an easy-to-read style.

B. Aim 2 was to stimulate research. Activities directed toward this aim were carried out in cooperation with State Director of Vocational Education and RCU. An objective evaluation has not been made to determine extent to which research activities have been stimulated. Some indication of the effective use of the unit in achieving this aim was given in the evaluation made at the conclusion of the first eighteen-month period.

C. Aim 3 was to establish effective procedures for information dissemination. This aim has been achieved in part. Some indication was given indicating that strategies developed were sound. At the same time there was a suggestion that more attention should be given to improving and increasing information dissemination on a statewide basis.

D. Aim 4, to facilitate innovative program development, has been achieved largely as a result of the vigorous curriculum program development of the State Director of Vocational Education. Relative effectiveness of the various component activities directed toward achieving Aim 4 is indicated by the RCU evaluation, summarized in Appendixes K-1 and L-1.

E. Examination of the returns from the evaluation questionnaire indicated that the four major aims of RCU were considered by respondents to be extremely important. Not all activities were considered equally effective. Some of the activities were rated very effective and others were considered to be ineffective for achieving RCU aims. Activities rated the highest and considered most effective were:

1. determining priorities of problems in vocational education in Oregon.

2. reporting regularly on research projects with implications for vocational education in Oregon.

3. carrying out research studies in employment opportunities, manpower projections, human resources, and educational resources and development with implications for vocational education.

4. conducting surveys to find out what vocational educators and school administrators think are the most critical problems.

5. conducting brainstorming sessions including representatives from labor, management, state and local government, and lay persons to identify problems in vocational education.

6. providing demonstrations and consultations for use of new methods, media, and materials.

7. providing consultation service to local schools to assist in developing innovative, research-based programs.

8. setting up demonstration programs for vocational educators.

9. issuing Translating Research Into Practice (TRIP) bulletins, one and two page bulletins in non-technical language pointing up practical ways for vocational educators, teachers, counselors, and administrators to translate theory into action.

10. maintaining a reference center housing difficult-to-obtain documents and standard references on vocational education research, innovative and exemplary programs, legislation, and conference proceedings.

11. providing loan service to users making available on two-week loan, unpublished and difficult-to-obtain references about research, legislation, and innovative programs in vocational education.

12. carrying on a program of acquisitioning, cataloging, and shelving documents for loan and reference.

13. operating an information retrieval system to provide bibliographies on vocational education topics and list research and innovative programs by geographic area.

Activities considered relatively unimportant were:

1. arranging for consultative services from professional personnel not on RCU staff to write proposals for institutions of higher education.

2. arranging for consultative services from professional personnel not on RCU staff to write proposals for local and state agencies.

3. arranging for consultative services from professional personnel not on RCU staff to write proposals for elementary schools.

4. arranging for consultative services from professional personnel not on RCU staff to write proposals for State Department of Education.

5. making informal reviews of proposals submitted to State Director of Vocational Education for funding under provisions of P. L. 88-210 4(a) with recommendations for action on proposal.

6. determining relationship between Oregon problems and priorities listed by federal government.

7. conducting workshops with representatives from higher education to identify problems in vocational education.

Responses to an open-ended question, "What suggestions or comments do you have?" revealed that a great number of educators lack information about the unit.

These data will be used as a basis for restructuring the Research Coordinating Unit program during the continuation period, December 1, 1966 to June 30, 1968.

V. Conclusions, Implications

The Research Coordinating Unit in Oregon was established to coordinate research activities having implications for vocational education, and to contribute to vocational education program development by performing liaison function between educators and the research community. The Oregon RCU attempted to implement this twofold purpose by achieving four objectives: (1) defining problems that called for research; (2) stimulating research; (3) disseminating information; and (4) developing research-based curricula.

In the first eighteen months of the RCU operation an organizational structure has been established, a procedural plan has been developed, and some inroads were made toward achieving the RCU objectives. Evaluation which was made at the end of the eighteen-month period, June 1, 1965 to November 30, 1966 suggests that each of the four objectives is viable. There appears to be a need for reorganizing and redefining the activity plan which was set up for achieving the RCU aims. Some of the activities appear to be much more effective than others.

The organizational plan for the Oregon Research Coordinating Unit, involving a cooperative approach with responsibilities shared between the State Director of Vocational Education and the State System of Higher Education has proved to be efficient. It is suggested that the interaction between local schools, government offices, and institutions of higher education is in large measure a function of the organizational structure developed for the unit.

The challenge which lies ahead for the Oregon Research Coordinating Unit for the second eighteen-month operating period appears to be one of research and program development in vocational education in Oregon. Meeting the challenge will demand marshalling forces and making an all-out effort to achieve as high a degree of performance as possible.

VI. Summary

A. Purpose

Oregon Research Coordinating Unit, established at Oregon State University, Corvallis, June 1, 1965 was founded on the belief that in a world of rapid change there is great need to train youth and retrain adults for gainful employment. It was assumed that quality vocational education is predicated on research and that coordination

of efforts was needed to maximize potential strengths of the State Department of Education, institutions of higher education, and local schools. Research Coordinating Unit was established to stimulate quality research and to increase implementation of research findings in vocational education programs and practices.

B. Methods

1. Four major aims were defined.

a. Aim 1--to define research problems and identify researchable issues and problems.

b. Aim 2--to use an interdisciplinary approach to stimulate and encourage quality research, to upgrade competencies in vocational education research, and to contribute to vocational education theory building.

c. Aim 3--to implement effective strategies and procedures for information dissemination.

d. Aim 4--to facilitate implementation of research findings and to improve programs, practices, and facilities of vocational education.

2. An organizational structure implementing a cooperative undertaking between the State Department of Education and the State System of Higher Education was established to achieve the aims. Allocation of human resources was made in terms of managerial, professional, and support staff. The professional staff and consultants spent 1,376 manhours on Aim 1, defining and identifying researchable problems with 12,485 manhours devoted to achieving Aim 2, stimulating and encouraging quality research; Aim 3, implementing effective strategies and procedures for information dissemination; Aim 4, facilitating implementation of research findings. Distribution of Oregon RCU manhours is shown in Appendix A-2.

3. Activities to achieve the aims were defined and relationship of activities was identified.

C. Results

Major results were as follows:

1. To achieve Aim 1, identifying and defining researchable problems, was accomplished by three populations of educators: staff

members of the State Division of Community Colleges and Vocational Education, administrators of public secondary and post-secondary schools; vocational teachers, principals, and superintendents; and staff members of institutions of higher education. The Central Advisory Panel refined these problems to six basic vocational education needs and formulated methods to meet these needs.

2. To achieve Aim 2, stimulating and encouraging quality research, RCU staff provided consultation services to local school districts and units in other states; reviewed proposals and made recommendations for the proposal disposition, prepared and disseminated training materials; assisted in research proposal preparation; held workshops, directed research to find out the interest in vocational education of staff members of universities and colleges and to find out the opinions of labor representatives in Oregon on training needs.

3. To achieve Aim 3, implementing effective strategies and procedures for information dissemination, RCU issued a monthly newsletter, Oregon Vocational Education Newsletter (OVEN), established a dissemination center, issued informational bulletins, and established an information retrieval system. Staff members attended professional meetings, and presented reports and papers.

4. To achieve Aim 4, facilitating implementation of research findings, staff members visited local schools to discuss research implications for the curriculum, assisted in establishing new programs, and identified curricula which could be used in demonstration programs. Staff members planned seminars, prepared demonstration proposals outlining research-based innovative programs, and prepared instructional aides designed to discuss in non-technical language research findings which could be implemented directly in a school setting by vocational education teachers. The educational specialist, assigned to the staff of the State Director of Vocational Education, devoted full time to developing and implementing innovative programs in local schools.

D. Discussion

An evaluation of the effectiveness of the Oregon RCU was made implementing survey technique. A total of 700 questionnaires was mailed to Oregon educators. Analysis of 123 returns, a representative cross section of the population by geographic area and respondent occupation revealed consensus concerning viability of the objectives. However, that was not agreement concerning effectiveness

of RCU activities. Results of the evaluation of the Oregon Research Coordinating Unit by teachers, supervisors, and administrators suggest that the following activities should be expected to contribute to achieving the RCU objectives and meeting the need for which the unit was established: facilitating exchange of ideas among individuals representing education, labor, industry, and government; conducting surveys to identify priority problems in vocational education; conducting research in employment opportunities, manpower projection, and educational developments; reporting regularly in non-technical language on pertinent research; providing demonstrations and consultative services relating to development of innovative programs; maintaining and operating a dissemination center; providing for information retrieval and dissemination.

The evaluation data will be used to provide direction for restructuring and modifying the Oregon Research Coordinating Unit operational plan. The challenge which the unit will attempt to meet is the marshalling of forces to make an all-out effort for maximizing coordination among research and program development activities in vocational education in Oregon.

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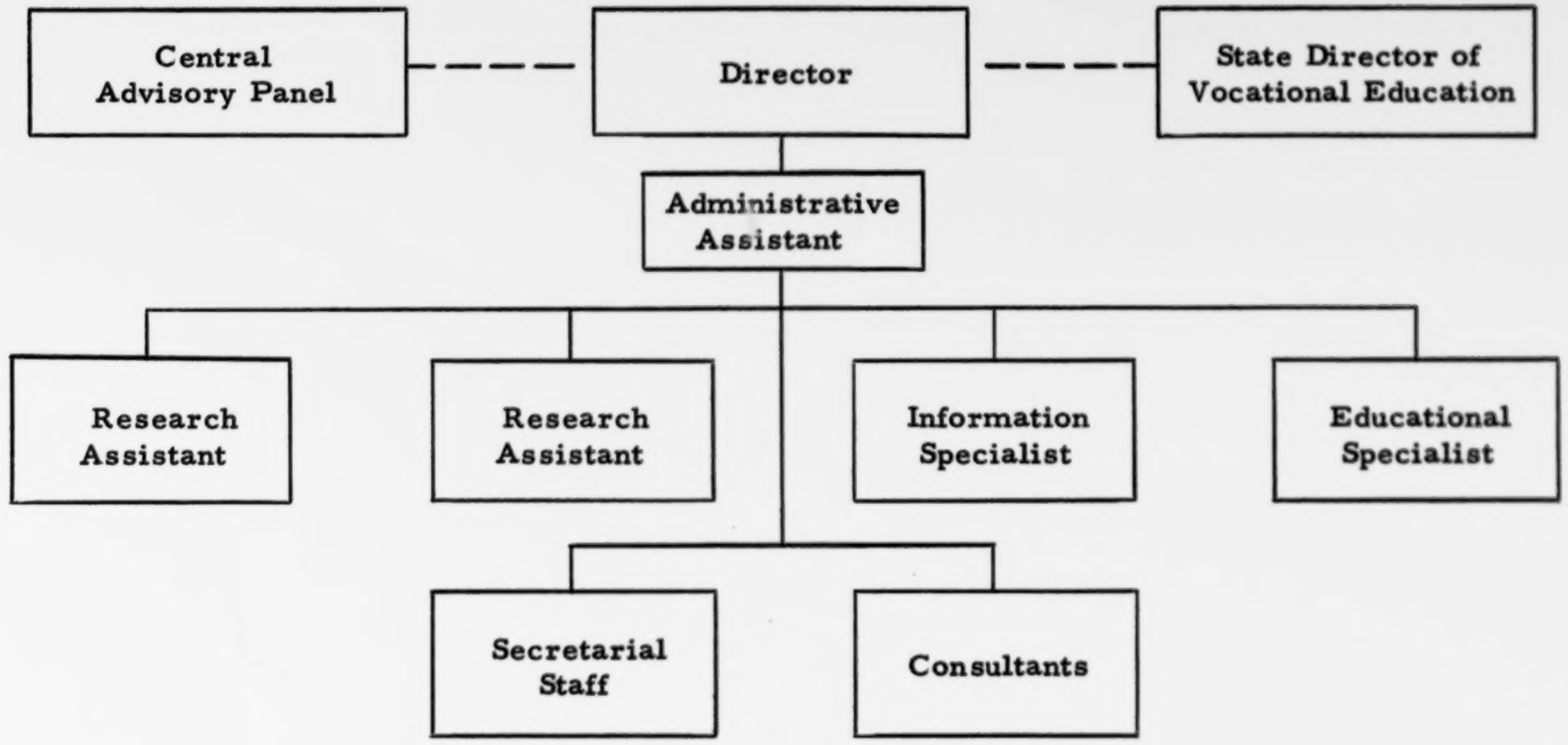
OREGON RESEARCH COORDINATING UNIT ORGANIZATION CHART



DISTRIBUTION OF MANHOURS SPENT IN OREGON RCU OPERATION
JUNE 1, 1965 TO NOVEMBER 30, 1966

Personnel category	Funded positions **	Manhours spent in management and aim-related work					
		Project management	Aim 1	Aim 2	Aim 3	Aim 4	Total
Administration	1.00 FTE	1407	456	749	500	375	3487
Professional	2.25 FTE*		116	994	2220	1948	5278
Consultants			100	455	50	350	955
Secretarial	1.50 FTE*	533	704	1058	1191	2093	5579
Library student assistants				30	182		212
Research student assistants				150	140		290
Total	4.75 FTE	1940	1376	3436	4283	4766	15801

*Includes unreimbursed time as follows:

Administrative
- University (Ryan) .33 FTE

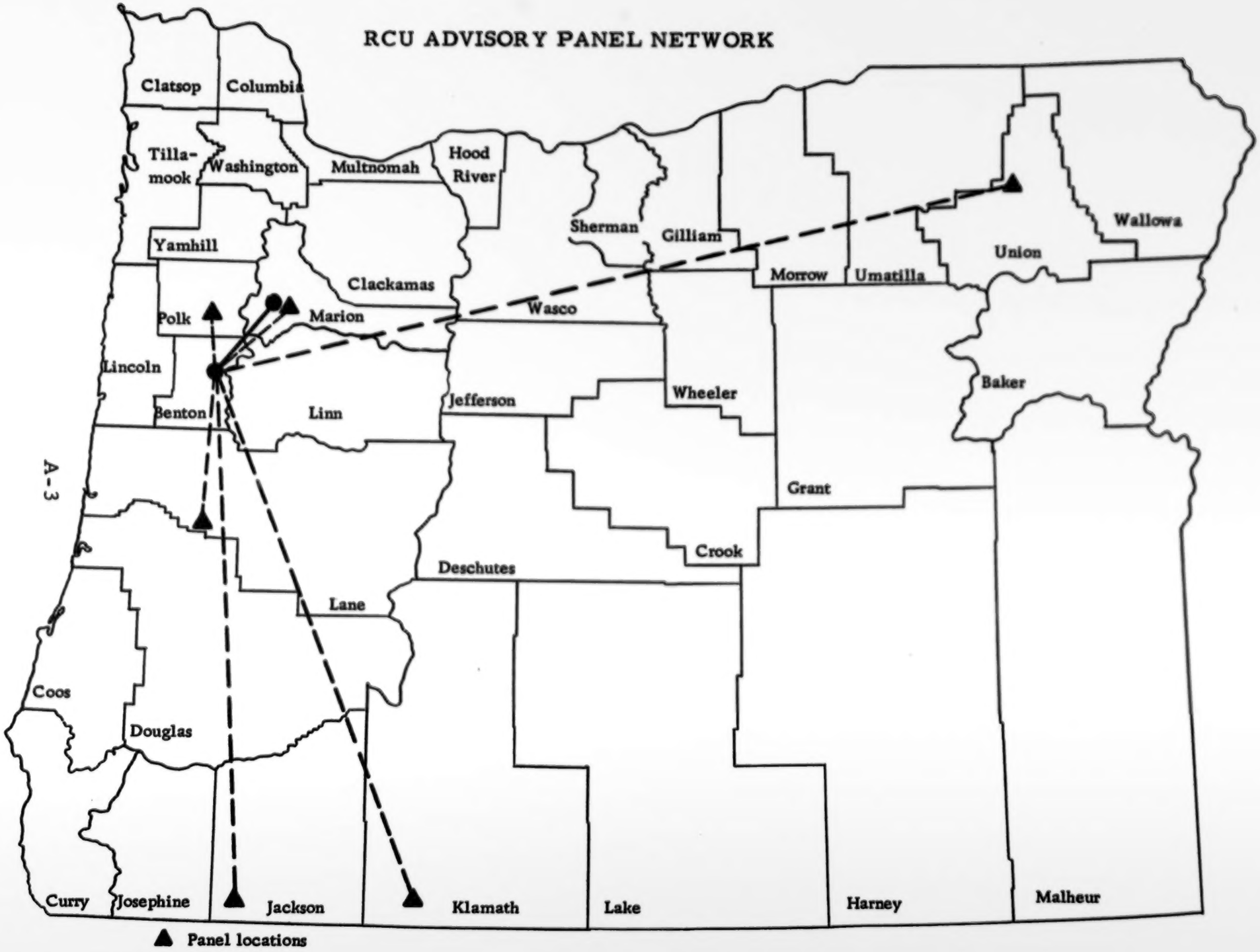
Secretarial
- University (staff) .70 FTE

**Does not include the following local contribution to project:

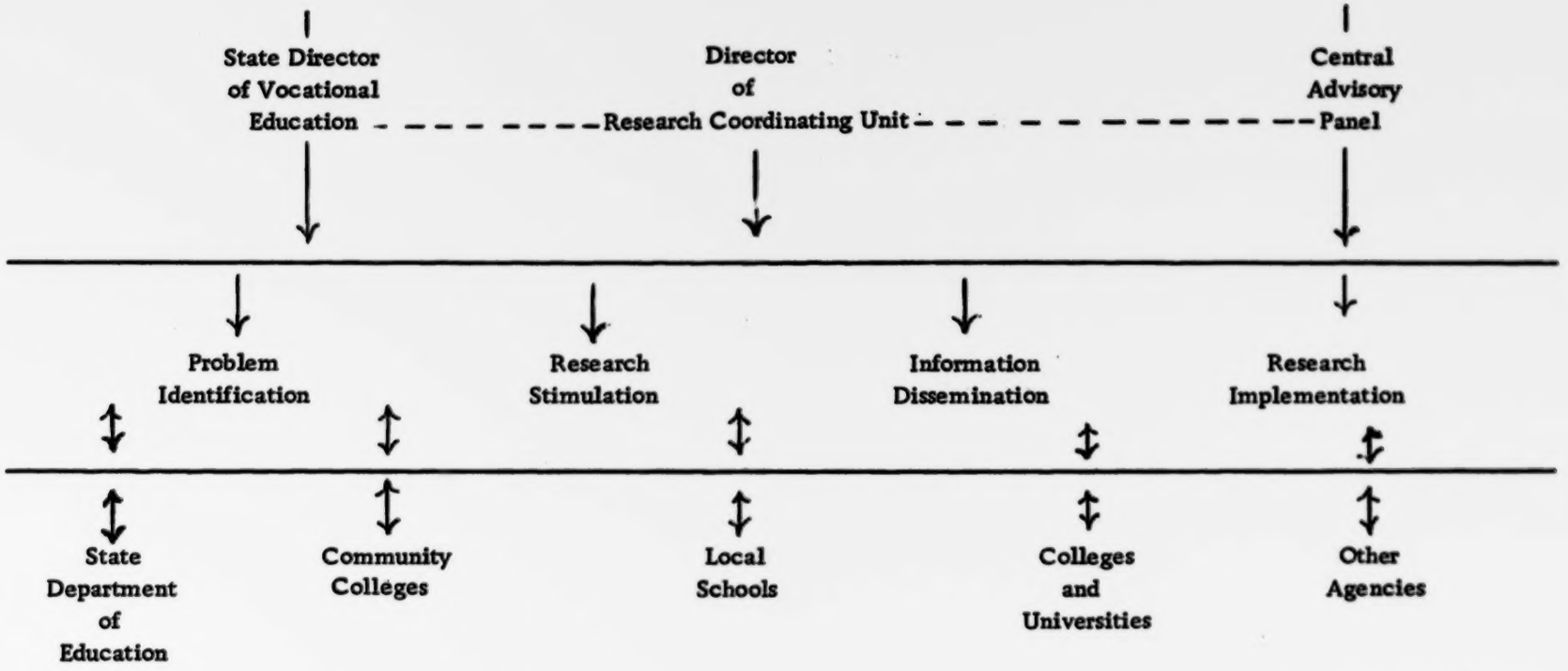
Administration
- State Department of Education (Loomis) .08 FTE

Professional
- University (consultant staff) .08 FTE

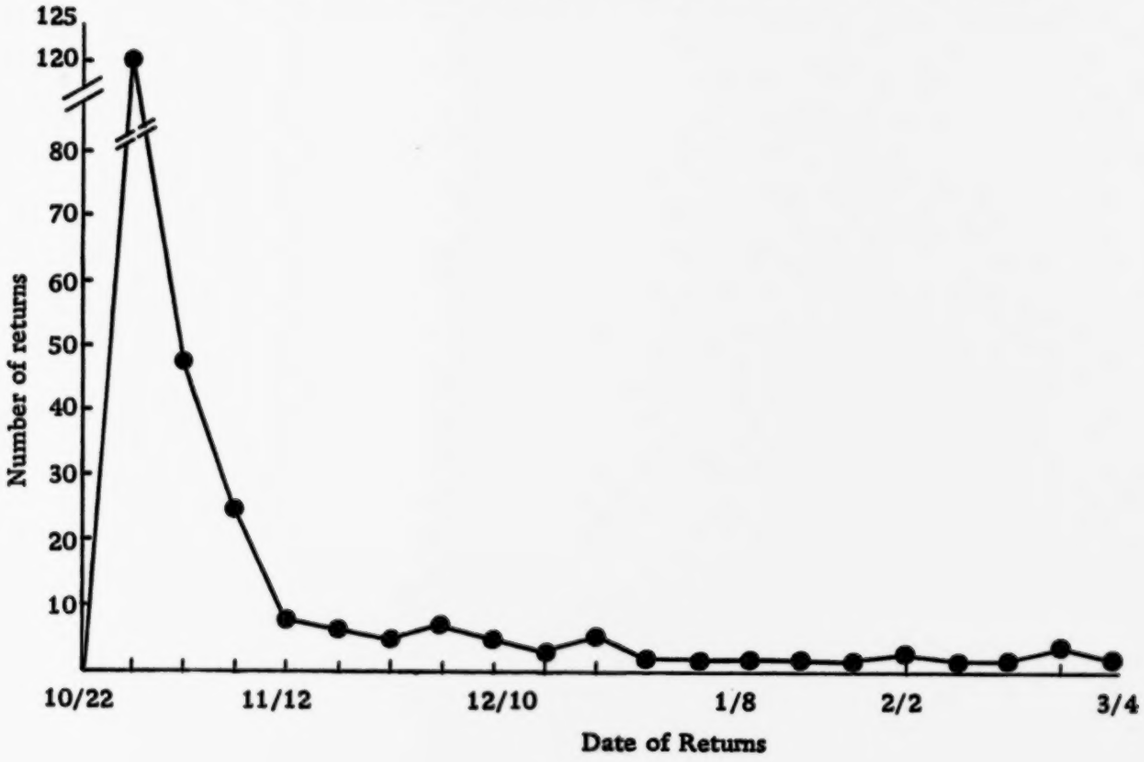
Secretarial
- State Department of Education .14 FTE


RCU ADVISORY PANEL NETWORK
Clatsop
Columbia
Tilla-
mook
Washington
Multnomah
Hood
River
Sherman
Gilliam
Wallowa
Union
Yamhill
Morrow
Umatilla
Clackamas
Polk
Marion
Wasco
Lincoln
Baker
Jefferson
Wheeler
Benton
Linn
Grant
Crook
Deschutes
Lane
Coos
Douglas
Curry
Josephine
Jackson
Klamath
Lake
Harney
Malheur
Panel locations

RCU AIMS AND IMPLEMENTATION NETWORK



DISTRIBUTION OF 222 RETURNED QUESTIONNAIRES MAILED OUT BY OREGON RCU FOR THE SURVEY " IDENTIFICATION OF PROBLEMS IN VOCATIONAL EDUCATION."



NATIONAL PROBLEMS IN VOCATIONAL EDUCATION AND THEIR RANK ORDER OF LOCAL SIGNIFICANCE AS DETERMINED BY 222 OREGON EDUCATORS

Rank order of significance	National Problem	Number of respondents classifying problems as major problems in Oregon
1	The average rural community cannot provide adequate vocational education.	180
2	Students cannot make realistic job choices in terms of their individual potential and the occupational structure.	169
3	There is not an adequate supply of effective teachers to offer needed vocational education programs.	160
4	There is not enough information on the relationship of on-the-job work experience and students' ability to hold jobs.	158
5	Students lack knowledge, attitudes, and skills for adapting to changing manpower needs.	155
6	Students lack adequate knowledge of their abilities to make continuing career choices.	153
7	Workers lack the ability to adjust to changing work situations.	150
8	There is not adequate information about the newest skills and competencies required by business and industry to enable teachers to prepare their students to hold jobs.	147
9	There is not adequate information about predicted changes in local manpower needs.	147

National Problems in Vocational Education and Their Rank Order of Local Significance as Determined by 222 Oregon Educators (continued)

Rank order of significance	National Problem	Number of respondents classifying problems as major problems in Oregon
10	There is not adequate information available about hiring practices of business and industry to help students find jobs.	143
11	Employed workers do not take advantage of courses offered by vocational education to upgrade their competencies on the job.	141
12	There is not adequate information about the skills and knowledge needed by workers to hold jobs in the current labor market.	130
13	A large proportion of workers is not able to hold jobs commensurate with potential earning capacities because the workers' skills and knowledge have been outmoded by technological advancement.	130
14	A large proportion of unemployed workers is unable to hold jobs because of lack of basic understanding of reading, writing, and mathematics.	124
15	There is not adequate information about jobs currently available in different occupations.	113
16	Workers are not adequately prepared to make personally satisfying and socially productive use of increased leisure time.	113

Regional grouping of vocational education systems in Oregon.

Workers are unable to adjust to changing situations.

Students cannot make realistic job choices according to potentialities.

Rural communities are not able to provide adequate vocational education.

There is a lack of effective teachers for needed vocational education programs.

Students are unable to make continuing career choices.

Students lack information about skills and knowledge needed for current labor market.

Students lack information about hiring practices of business and industry.

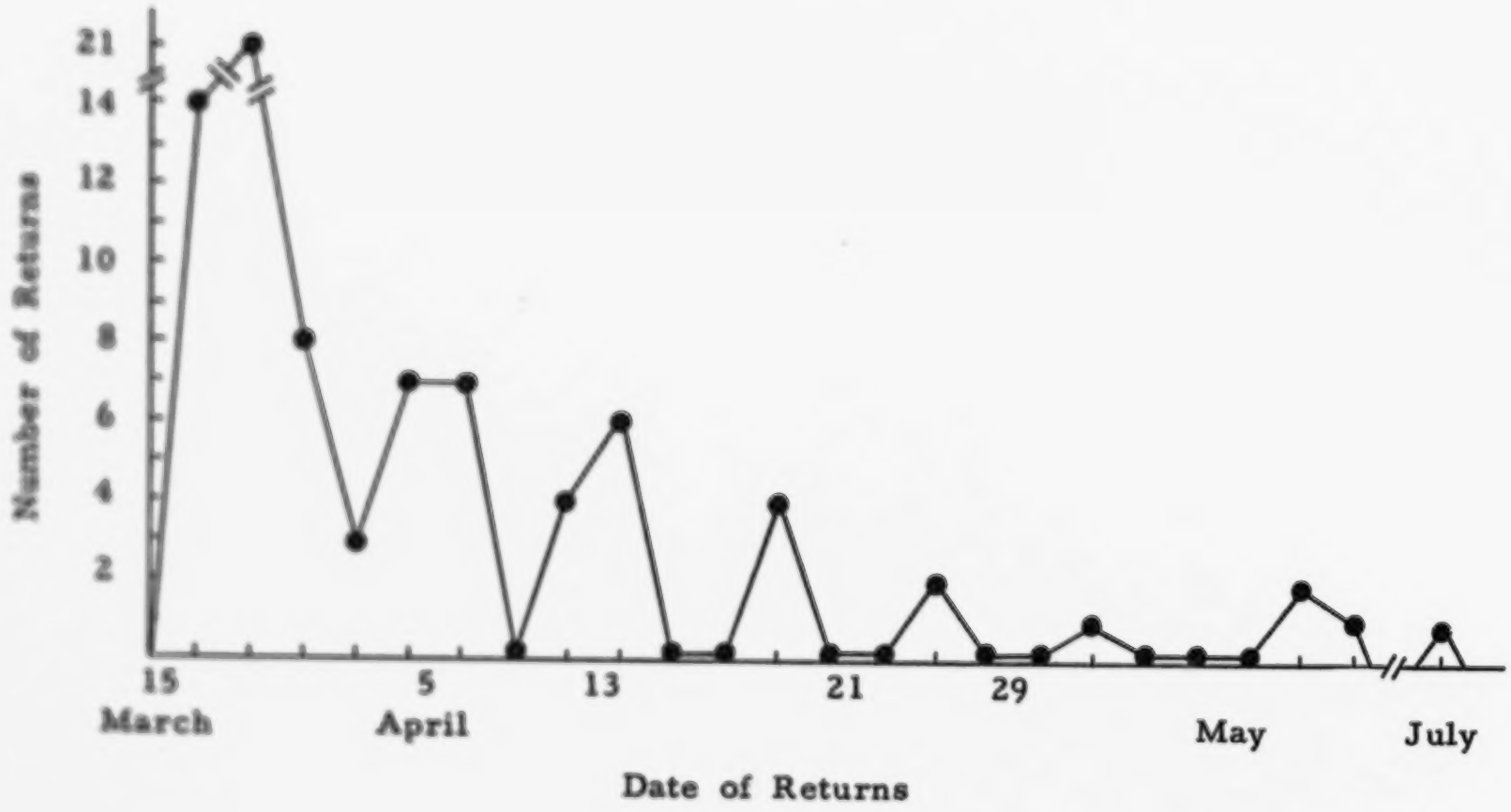
Students lack information about predicted changes in manpower needs.

Note: Two shadings in one county indicate that educators felt there were two problems of equal significance.

PROPOSALS REVIEWED BY OREGON RCU JUNE 1, 1965 THROUGH NOVEMBER 30, 1966

Source of referral	Proposal initiator	Source of funds requested	RCU review action of proposals			
			Recommendation given			
			Approved	Provisionally approved	Disapproved	Total
State Department of Education	State Department of Education	88-210 4(c)	-	7	-	7
State Department of Education	Local Schools	88-210 4(a)	4	5	15	24
State Department of Education	Universities	88-210 4(c)	-	-	2	2
Universities	Universities	88-210 4(c)	-	6	1	7
Local Schools	Local Schools	88-210 4(c)	-	-	2	2
State Agencies	State Agencies	89-10	-	-	1	1
Total			4	18	21	43

TIME DISTRIBUTION OF RETURNED QUESTIONNAIRES INDICATING
STATE SYSTEM OF HIGHER EDUCATION INTEREST
IN VOCATIONAL EDUCATION



EVALUATION OF OREGON VOCATIONAL EDUCATION NEWSLETTER (OVEN) BY 27 INDIVIDUALS ON THE MAILING LIST

Statement about OVEN	Respondent opinion about statements				Number of individuals who did not answer	Total number of respondents
	Most generally true	True slightly more than 1/2 time	True slightly less than 1/2 time	Almost never true		
OVEN articles make me think about research related to vocational education.	14	8	0	5	0	27
OVEN articles lack sufficient detail.	1	7	11	5	3	27
OVEN articles are too technical.	1	1	3	18	4	27
OVEN articles are not technical enough.	0	3	7	10	7	27
OVEN is too long.	1	1	2	18	5	27
OVEN information has been useful to me.	12	7	5	0	3	27
I would recommend OVEN to others.	19	4	1	0	3	27
OVEN is interesting.	16	8	0	0	3	27
I read OVEN.	23	0	1	0	3	27
OVEN needs more pages.	6	3	4	7	7	27

NEWSLETTER EVALUATION: COMMUNICATIONS ADDRESSED TO OVEN EDITOR

"I have enjoyed your most recent issue of Oregon Vocational Education Newsletter and information it contained."

G. David Turnbull, Chairman,
Industrial Arts and Vocational
Agriculture Department
November, 1965

"Please place my name on your regular mailing list for OVEN. I found the first issue to be most interesting."

Lawrence Edwards, Coordinator
of Vocational Guidance, Portland
Public Schools
November, 1965

"I have recently joined the U.P.S. staff after teaching in the Oregon State System of Higher Education. As a subscriber to OVEN I wonder if my subscription is good in Washington . . . . I am teaching a course in Vocational Guidance, graduate level, and wonder if these ten people can be added to your mailing list?"

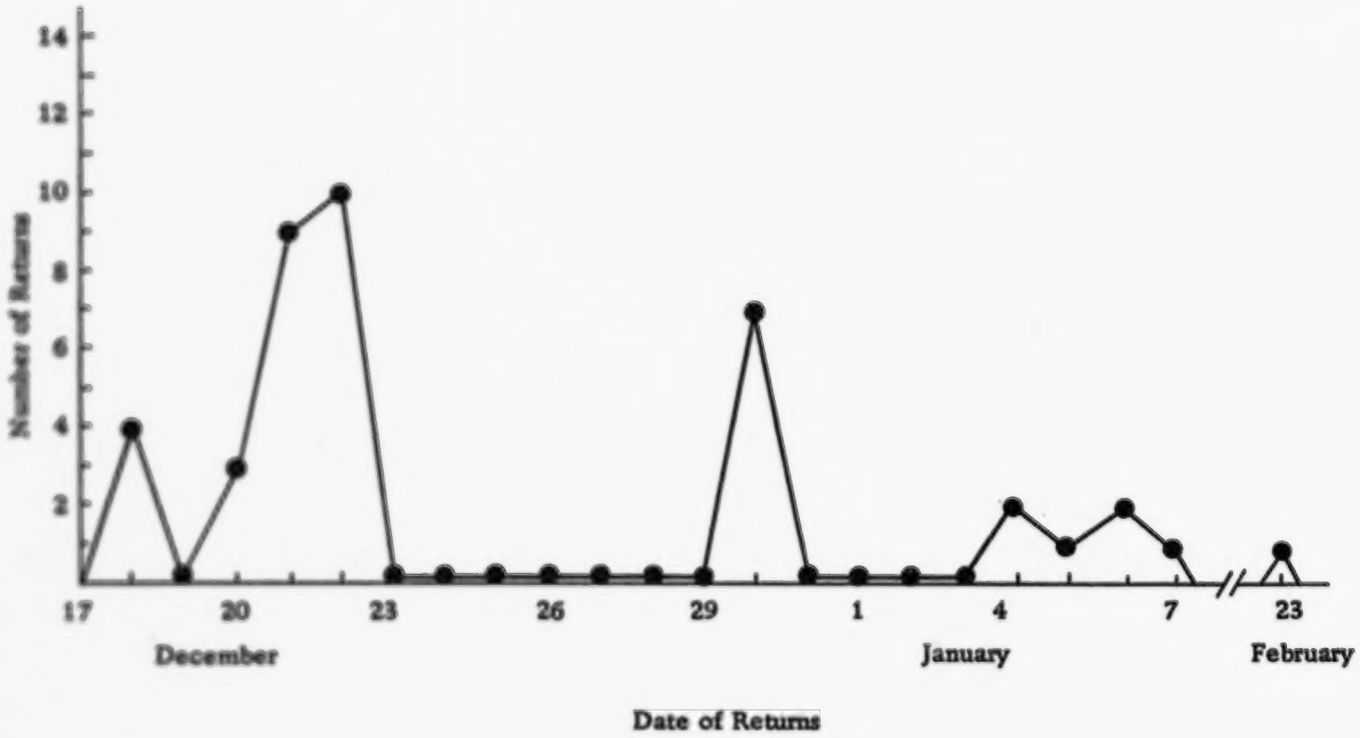
Thomas C. Anderson,
School of Education,
University of Puget Sound
September, 1966

Newsletter Evaluation: Communications Addressed to OVEN Editor (continued)

"Recently Dr. Carl Lamar, Director of the Kentucky Research Coordinating Unit, gave me a group of your Oregon Vocational Education Newsletters. I have been quite impressed with these newsletters and the information contained in them . . . . . We are looking for new ways to improve our newsletter and hope you will inspire us to do a better job."

Charles D. Wade, Director
of Information Services,
Kentucky Research
Coordinating Unit
November, 1966

TIME DISTRIBUTION OF RETURNS ON IDENTIFYING VOCATIONAL EDUCATION RESEARCH 1960 THROUGH 1965



DISSEMINATION CENTER DOCUMENTS PROCESSED AND ABSTRACTED

Documents Evaluated and Selected

For loan	363
For reference	37
Total Evaluated and Selected	400
Documents evaluated and not selected	129
TOTAL DOCUMENTS PROCESSED	**529**

Documents Abstracted

Abstracted	329
Not abstracted	71
TOTAL ABSTRACTED DOCUMENTS	**400**

IDENTIFICATION OF DISSEMINATION CENTER USERS, JUNE 1, 1965 TO NOVEMBER 30, 1966

Institution or agency where users were employed	Job classification of users						Total number of users
	Instructional	Research	Adminis-trative	Student	Counselor	Librarian	
University	20	11	8	2	0	0	41
Community college, vocational-technical institute	1	1	8	3	0	3	16
Elementary and secondary schools	16	0	26	0	9	0	51
State agency	0	0	24	0	0	0	24
Federal agency	0	0	4	0	0	0	4
Industry	0	0	2	0	0	0	2
Total	37	12	72	5	9	3	138

SUBJECTIVE EVALUATIONS OF DISSEMINATION CENTER

"I am returning herewith the material loaned us in August with the grateful acknowledgment of its usefulness to us and with congratulations for the establishment and smooth functioning of your Dissemination Center."

Donald E. Deyo, Director
Master Plan Study
The Commonwealth of Massachusetts
Board of Regional Community Colleges
September, 1965

"Under separate cover I am returning the Oregon State research proposal No. 062 . . . . that you graciously loaned to me. It was of considerable value and I appreciate your cooperation."

George A. McCutchan
Assistant Superintendent
Vocational Education
State of Wyoming
October, 1965

"Thank you for being so prompt in answering my request for the loan of your research proposal. I am sure it will be of some benefit to us."

Arthur R. Keller, Supervisor
Counseling and Guidance
Kankakee, Illinois
November, 1965

"I am returning the model proposal which Mr. Harry Jacoby, President of Umpqua Community College had on loan. The material was most helpful to us . . . ."

Darrel Langevin, Director
Vocational Education Research Project
Roseburg, Oregon
June, 1966

"Another teacher and myself are involved in vocational work here at Roosevelt High School . . . . In looking over the 'Supplement to Selected Bibliographies Pertaining to Vocational Education,' we find there are a number of articles which seem promising and would like to have two copies of each if this is possible . . . ."

John W. Rost
Vocational Counselor
Portland Public Schools
September, 1966

"In regard to the bibliographies pertaining to vocational education which the Research Unit is maintaining on file, I am wondering if these materials may be studied there at the college? Please let me know if this procedure may be followed."

James V. Lacy
Director
Klamath County Vocational Education Project
June, 1966

CLASSIFICATION OF DOCUMENTS IN OREGON RCU INFORMATION RETRIEVAL SYSTEM
JULY 1, 1965 TO NOVEMBER 30, 1966

Kind of document	Periods										Total number of documents
	7/1/65-6/30/66			7/1/66-8/31/66			9/1/66-11/30/66				
	Development			Trial			Operational				
	Indexed	Banked	Total	Indexed	Banked	Total	Indexed	Banked	Not Banked	Total	
Research											
Proposal	0	0	0	12	12	12	19	19	0	19	31
Final Report	14	14	14	78	78	78	90	82	8	90	182
Research Related Materials											
Descriptive	16	16	16	22	22	22	79	77	2	79	117
Statistical	0	0	0	1	1	1	14	11	3	14	15
Legislative	0	0	0	0	0	0	2	2	0	4	4
Innovative programs	0	0	0	3	3	3	9	8	1	9	12
Conference proceedings	0	0	0	34	34	34	54	51	3	54	88
Total	30	30	30	150	150	150	269	250	19	269	449

CONFERENCES AND SEMINARS ATTENDED BY RCU PERSONNEL

- Directors of Vocational Education Research Centers, Projects and Units, July 29-30, 1965, Washington, D. C.

- American Psychological Association National Convention, September 4-7, 1965, Chicago; paper, "Counseling of Small Groups," presented by Oregon RCU director.

- Western States Regional Conference on Occupational Research Coordinating Units, November 18, 1965, Phoenix, Arizona; paper, "Identifying Researchers," given by Oregon RCU director.

- National Vocational Education Research Seminar, January 31-February 4, 1966, Columbus, Ohio.

- American Educational Research Association, Administration of Educational Research Session, February 16, 1966, Chicago; paper, "Using Simulated Situations in Problem Solving Tasks," given by RCU director.

- Advisory Committee Meeting on Information Retrieval Systems, March 25-26, 1966, Ohio State University, Columbus, Ohio.

- American Personnel and Guidance Association Convention, April 8, 1966, Washington, D. C.; paper; "Small Group Counseling," by Oregon RCU director.

- American Vocational Association, December 2-8, 1966, Denver, Colorado; paper, "Objectives and Activities of Oregon RCU," given by Oregon State Director of Vocational Education.

- Occupational Mobility and Migration Seminar, April 18-22, 1966, Raleigh, North Carolina.

- Research in Vocational and Technical Education Conference, June 10-11, 1966, Madison, Wisconsin.

- PERT Management Training Workshop, Department of the Air Force, June 20-24, 1966, Washington, D. C.

EVALUATION OF COST-BENEFIT SEMINAR, OCTOBER 19, 1966

Statements concerning cost-benefit seminar	Participant responses			
	Number of participants who agreed	Number of participants who disagreed	Number of participants who did not respond	Percent of agreement
The purposes of the seminar were clear.	8	7	0	53
I learned something new.	12	3	0	80
I considered the information valuable.	12	3	0	80
Feasible solutions to problems were presented.	7	8	0	46
Information was not too elementary.	14	0	1	93
The information stimulated me to think objectively about topics covered.	10	5	0	66
The leaders were well prepared.	15	0	0	100
The program met my expectations.	6	8	1	40
This time was not wasted on trivial matters.	15	0	0	100
Another seminar should be held in the future.	12	3	0	80

EVALUATION OF OREGON RCU AIMS AFTER 18 MONTHS OPERATION

Aims of RCU	Evaluation of aims			
	Number who believe aim should be an objective of RCU	Number who do not believe aim should be objective of RCU	No response	Total number of responses
Aim 1: Identifying researchable problems in vocational education should be an aim of the RCU	114	2	7	123
Aim 2: Stimulating and encouraging quality research should be an aim of the RCU.	111	3	9	123
Helping to upgrade research competencies of vocational education should be an aim of the RCU.	106	6	11	123
Aim 3: Developing effective strategies for information dissemination should be an aim of the RCU.	103	7	13	123
Disseminating information to vocational educators should be an aim of the RCU.	106	5	12	123
Aim 4: Assisting local schools to translate research and theory into improved and innovative programs, practices, and facilities should be an aim of the RCU.	105	5	13	123

EVALUATION BY 123 OREGON EDUCATORS ON THE DEGREE OF IMPORTANCE OF OREGON RCU ACTIVITIES FOR ACHIEVING THE FOUR MAJOR AIMS OF THE UNIT, JULY 1, 1965 TO NOVEMBER 30, 1966

Activities of RCU	Degree of importance for achieving RCU aims					Total
	Extremely important	Moderately important	Slightly important	Not important	No response	
Conduct surveys to find out what vocational educators and school administrators think are the most critical problems.	70	37	11	1	4	123
Conduct brainstorming sessions including representatives from labor, management, state and local government, and lay persons to identify problems in vocational education.	70	35	7	5	6	123
Conduct workshops with representatives from higher education to identify problems in vocational education.	26	53	25	7	12	123
Determine relationship between Oregon problems and priorities listed by federal government.	25	44	32	5	17	123

Evaluation by 123 Oregon Educators on the Degree of Importance of Oregon RCU Activities for Achieving the Four Major Aims of the Unit, July 1, 1965 to November 30, 1966 (continued)

Activities of RCU	Degree of importance for achieving RCU aims					Total
	Extremely important	Moderately important	Slightly important	Not important	No response	
Determine priorities of problems in vocational education in Oregon.	78	29	5	2	9	123
Operate an information retrieval system to provide bibliographies on vocational education topics and list research and innovative programs by geographic area.	60	39	3	2	19	123
Maintain a reference center housing difficult-to-obtain documents and standard references on vocational education research, innovative and exemplary programs, legislative, and conference proceedings.	65	25	9	5	19	123
Provide loan service to users making available on 2-week loan unpublished and difficult-to-obtain references about research, legislation, and innovative programs in vocational education.	65	25	6	7	20	123

Evaluation by 123 Oregon Educators on the Degree of Importance of Oregon RCU Activities for Achieving the Four Major Aims of the Unit, July 1, 1965 to November 30, 1966 (continued)

Activities	Degree of importance for achieving RCU aims					Total
	Extremely important	Moderately important	Slightly important	Not important	No response	
Issue TRIP bulletins, and three-page bulletins in non-technical language pointing up practical ways for vocational educators, teachers, counselors, administrators to translate theory into action.	67	24	7	1	24	123
Arrange for consultative services from professional personnel not on RCU staff to write proposals for State Department of Education.	22	34	15	14	38	123
Arrange for consultative services from professional personnel not on RCU staff to write proposals for elementary schools.	20	25	20	18	40	123
Arrange for consultative services from professional personnel not on RCU staff to write proposals for secondary schools.	30	38	8	8	39	123

Evaluation by 123 Oregon Educators on the Degree of Importance of Oregon RCU Activities for Achieving the Four Major Aims of the Unit, July 1, 1965 to November 30, 1966 (continued)

Activities	Degree of importance for achieving RCU aims					Total
	Extremely important	Moderately important	Slightly important	Not important	No response	
Arrange for consultative services from professional personnel not on RCU staff to write proposals for post-secondary schools.	35	26	9	12	41	123
Arrange for consultative services from professional personnel not on RCU staff to write proposals for institutions of higher learning.	16	26	11	24	46	123
Arrange for consultative services from professional personnel not on RCU staff to write proposals for local and state governments.	17	22	18	25	41	123
Conduct seminars on research design and proposal writing.	34	33	15	11	30	123

Evaluation by 123 Oregon Educators on the Degree of Importance of Oregon RCU Activities for Achieving the Four Major Aims of the Unit, July 1, 1965 to November 30, 1966 (continued)

Activities of RCU	Degree of importance for achieving RCU aims					Total
	Extremely important	Moderately important	Slightly important	Not important	No response	
Make formal reviews of proposals submitted to State Director of Vocational Education for funding under provisions of P. L. 88-210 4(a) with recommendations for action on proposal.	26	37	7	18	35	123
Make formal reviews of proposals submitted directly to RCU by elementary and secondary, and post-secondary schools.	38	38	9	6	32	123
Make informal reviews of proposals submitted directly to RCU by local and state government offices.	21	36	10	14	42	123
Make informal reviews of proposals submitted directly to RCU by State Director of Vocational Education.	36	34	7	8	38	123

Evaluation by 123 Oregon Educators on the Degree of Importance of Oregon RCU Activities for Achieving the Four Major Aims of the Unit, July 1, 1965 to November 30, 1966 (continued)

Activities of RCU	Degree of importance for achieving RCU aims					Total
	Extremely important	Moderately important	Slightly important	Not important	No response	
Publish special bulletins on research and development, such as "How to Conduct a Research Study," "Criteria for Evaluation of Research Proposals," "Research in Oregon."	57	24	12	9	21	123
Provide consultative services to the State Department of Education.	44	34	8	8	29	123
Provide consultative services to elementary schools.	37	24	18	12	32	123
Provide consultative services to secondary schools.	68	24	2	4	25	123

Evaluation by 123 Oregon Educators on the Degree of Importance of Oregon RCU Activities for Achieving the Four Major Aims of the Unit, July 1, 1965 to November 30, 1966 (continued)

Activities of RCU	Degree of importance for achieving RCU aims					Total
	Extremely important	Moderately important	Slightly important	Not important	No response	
Provide consultative services to post-secondary schools.	64	20	3	4	32	123
Provide consultative services to institutions of higher education.	39	26	13	11	34	123
Provide consultative services to local and state government agencies.	37	29	17	8	32	123
Write proposals for research to be conducted by RCU.	39	38	8	7	31	123

Evaluation by 123 Oregon Educators on the Degree of Importance of Oregon RCU Activities for Achieving the Four Major Aims of the Unit, July 1, 1965 to November 30, 1966 (continued)

Activities of RCU	Degree of importance for achieving RCU aims					Total
	Extremely important	Moderately important	Slightly important	Not important	No response	
Carry out research studies in employment opportunities, manpower projections, human resources, and educational resources, and development with implications for vocational education.	73	20	5	2	23	123
Conduct training programs for advanced graduate students in vocational education.	46	29	7	10	31	123
Carry on a program of acquisition, cataloging, and shelving documents for loan and reference.	62	29	5	5	22	123
Issue a monthly newsletter.	55	28	12	7	21	123

Evaluation by 123 Oregon Educators on the Degree of Importance of Oregon RCU Activities for Achieving the Four Major Aims of the Unit, July 1, 1965 to November 30, 1966 (continued)

Activities of RCU	Degree of importance for achieving RCU aims					Total
	Extremely important	Moderately important	Slightly important	Not important	No response	
Report regularly on research projects with implications for vocational education in Oregon.	73	28	2	2	18	123
Report regularly information from State Director of Vocational Education and other state offices.	48	29	17	7	22	123
Report regularly on information from federal offices.	37	46	14	3	23	123
Report regularly on economic trends.	42	26	26	9	20	123

Evaluation by 123 Oregon Educators on the Degree of Importance of Oregon RCU Activities for Achieving the Four Major Aims of the Unit, July 1, 1965 to November 30, 1966 (continued)

Activities of RCU	Degree of importance for achieving RCU aims					Total
	Extremely important	Moderately important	Slightly important	Not important	No response	
Report regularly on recent articles from professional journals with implications for vocational education.	49	35	15	2	22	123
Provide consultative services to local schools to assist in developing innovative, research-based programs.	69	20	7	3	24	123
Write demonstration proposals to be used by local schools in setting up innovative, research-based programs.	51	30	14	3	25	123
Disseminate demonstration proposals to local schools for their use in conducting innovative, research-based programs.	59	27	11	2	24	123

Evaluation by 123 Oregon Educators on the Degree of Importance of Oregon RCU Activities for Achieving the Four Major Aims of the Unit, July 1, 1965 to November 30, 1966 (continued)

Activities of RCU	Degree of importance for achieving RCU aims					Total
	Extremely important	Moderately important	Slightly important	Not important	No response	
Conduct seminars to assist in developing innovative, research-based programs.	57	29	13	3	21	123
Conduct seminars to disseminate information about innovations and programs with implications for vocational educators.	53	37	5	6	22	123
Set up demonstration programs for vocational educators.	66	26	9	2	20	123
Provide demonstrations and consultation for use of new methods, media, and materials.	69	25	6	2	21	123